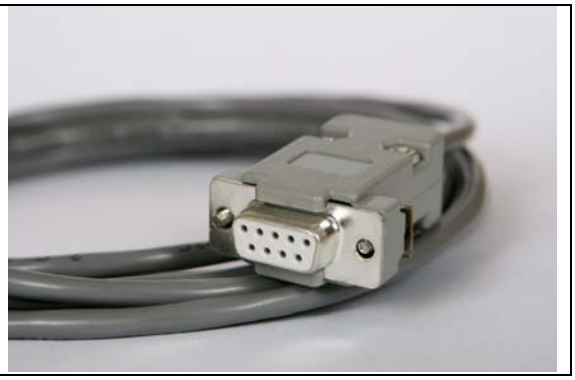
Quinton Q-Stress
Tango+ Interface Notes

To setup Tango+ with the Q-Stress stress system, simply follow the directions below.

1. Verify Correct RS-232 and ECG Trigger Cables

- **RS-232 Cable** – used to communicate with the Q-Stress. This cable enables the Q-Stress to prompt Tango+ when it needs a BP measurement, and allows the Tango+ BP reading to be transferred to the Q-Stress display and reports.
    - SunTech Part Number = 91-0013-00
    - Connection Ends:

Q-Stress Connection 9 pin female	Tango+ Connection 9 pin female
	

- **ECG Trigger Cable** – provides the ECG signal from the Q-Stress to the Tango+.
    - SunTech Part Number = 91-0018-00
    - Connection Ends:

Q-Stress Connection 1/8” phono plug	Tango+ Connection BNC male

Tango+ Monitor

2. Connect the RS-232 Cable

From: the RS-232 connection on the rear panel of the Tango+.
To: the **COM1** connection on the back of the Q-Stress system. The connection may not be labeled, but it is the only 9 pin male connection on the back of the stress system.

3. Connect the ECG Trigger Cable

From: the BNC External ECG connection on the rear panel of the Tango+.
To: the QRS connection (1/8" phono plug) on the back of the Q-Stress (in the SECG Configuration) or on the Preamp II box (Preamp II Configuration).

4. Tango+ Monitor Setup

a. When the operating screen is displayed, press the **SELECT** button 2 times. This will bring up the **MAIN MENU** screen.
b. Using the UP or DOWN arrows, highlight **MONITOR SET UP** and press the **SELECT** button.
c. Using the UP or DOWN arrows, highlight **STRESS SYSTEM** and press the **SELECT** button.
d. Using the UP or DOWN arrows, scroll through the list until **Q-Stress** is highlighted and press the **SELECT** button to confirm the choice.
e. Using the UP or DOWN arrows, select **EXIT** twice to return to the operating screen.

5. Q-Stress System Setup

a. On the desktop, double click the **QUINTON Q STRESS** icon.
b. Select **SETUP**.
c. Select **SYSTEM**.
d. Click on the **DEVICE SETUP** tab.
e. To the right of the Available Devices window, each COM port is shown with its associated device. The **BP Monitor** should be on COM1 and the **Treadmill** should be on COM2.

f. To change the COM port for the BP Monitor, select **BP Monitor** from the options in the Available Devices window. Click on the right arrow next to COM1 to select **BP Monitor.** The text "BP Monitor" should appear next to "COM1."
g. To change the COM port for the Treadmill, select **Treadmill** from the options in the Available Devices window. Click on the right arrow next to COM2 to select **BP Monitor.** The text "BP Monitor" should appear next to "COM2."
h. Choose **Save**.
i. Choose **Close**.
j. Use the **F10** key to initiate BP readings.

FAQs for Tango+

Q. The Tango+ displays a status message. What does it mean and what do I do?
A. See the Quick Set-Up guide (that is attached to your Tango+) or the Troubleshooting section in your User's Guide for details on the Status Message and solution.

Q. The Tango+ monitor returns results of 0/0 after blood pressure measurements. What do I need to do to get a BP reading?
A. There are certain noisy conditions where the Tango+ cannot accurately measure BP. When the Tango+ encounters these situations, it returns a reading of 0/0. Placement of the microphone attached to the cuff is critical for reliable operation of the Tango+. Follow the instructions in the **Cuff Tutorial** (located on the SunTech Medical website under Products → Tango+) for correct microphone placement. Follow steps 1 and 2 in Conducting the Stress Test in the User's Guide to provide the best conditions to obtain a measurement.

Q. Can I use a heart rate or blood pressure simulator to test whether the Tango+ is working correctly with my stress system?
A. You cannot use a heart rate or blood pressure simulator to test whether the Tango+ is working with your stress system. The Tango+ monitor requires that the ECG signal and the Korotkoff sounds, collected by the microphone in the cuff, originate from the same source, meaning the patient.

Q. I cannot clearly see the Tango+ display. How do I fix this?
A. If you cannot clearly read Tango+, you can adjust the contrast of the display by following these steps:

1. When the operating screen is displayed, press the **SELECT** button 2 times. This will bring up the **MAIN MENU** screen.
2. Using the UP or DOWN arrows, highlight **MONITOR SET UP** and press the **SELECT** button.
3. Using the UP or DOWN arrows, highlight **CONTRAST** and press the **SELECT** button.
4. Using the UP or DOWN arrows, modify the contrast of the screen. When you are finished, and press the **SELECT** button to confirm the choice.
5. Using the UP or DOWN arrows, select **EXIT** twice to return to the operating screen.

Q. My Tango+ displays a message, "Please VERIFY CALIBRATION" or "Equipment Maintenance and Calibration Required." What do I do?

A. Verification of Pressure Calibration

Equipment Required:

1. Calibrated electronic manometer or equivalent.
2. 500mL volume or the Orbit-K Adult Plus cuff wrapped around something that will not break or crush (no glass).
3. Hand Inflation Bulb with bleed valve.
4. Tubing, Tee pieces, and miscellaneous connectors or you can order the T-Tube Kit (SunTech Part # 98-0030-00).

Procedure:

5. When the operating screen is displayed, press the **SELECT** button 2 times. This will bring up the **MAIN MENU** screen.
6. Using the UP or DOWN arrows, highlight **MONITOR SET UP** and press the **SELECT** button.
7. Using the UP or DOWN arrows, highlight **VERIFY CALIBRATION** and press the **SELECT** button. The monitor will close its bleed valves and will display on its screen the pressure applied to the patient hose connector.
8. Verify the Tango+ calibration by manually inflating and checking the manometer against the pressure reading on the Tango+ display.
9. Once the calibration has been completed, use the UP or DOWN arrows to select **EXIT** twice and return to the operating screen.